

REMARKS

Examiner Adam L. Henderson is thanked for the thorough examination and search of the subject Patent Application.

All Claims are believed to be in condition for Allowance, and that is so requested.

Reconsideration of the rejection of the claims 1 and 2 under 35 U.S.C. 102(b) as being anticipated by Kamata et al. (EP 1 134 967 A2)), hereinafter Kamata, based on following remarks:

Claim 1 of the claimed invention discloses:

1. A method to compensate vignetting **in digital cameras** comprising a multiplication of each pixel output of the array sensor of the camera with a variable correction factor defined for each pixel, wherein said variable correction factor depends upon the distance between each pixel and the center of said sensor array.

The title of Kamata's invention is:

"Method and apparatus of correcting image data picked up from **photographic film**"

Accordingly Kamata discloses (paragraph [0010]):

"[0010] In view of the foregoing, an object of the present invention is to provide a method of correcting image data **picked up from pictures photographed on photographic film** that is held curved behind the taking lens, so as to compensate for the decrease in illuminance with the radial distance from the center of the exposure frame while taking account of the curvature of the film."

Furthermore Katama discloses in his paragraph "[0030]:

"[0030] Fig. 5 shows a **digital printer** embodying the method of the present invention. The **digital printer 50** is roughly **constituted of an image input section 51** and an image printing section 52 for printing pictures on photographic paper. The **image input section 51** functions as a **correcting device**, and is constituted of a code reader 53, a scanner 54 for picking up image data of a color picture from each exposure frame 22a on the photo filmstrip 22, an image memory 55, an image processing circuit 56 and a controller 57 for controlling these components."

Applicant believes that the claimed invention has not been anticipated by Kamata because Kamata discloses a non-analogous art. Kamata discloses, as outlined above, a **digital printer** performing corrections of pictures **taken on photographic paper**, while the claimed invention discloses in claim 1 "**A method to compensate vignetting in digital cameras**".

Therefore Applicant believes that claim 1 of the claimed invention has not been anticipated by Kamata.

Claim 2 of the claimed invention is a dependent claim upon its base claim 1, which is believed to be patentable according to the arguments outlined above.

Reconsideration of the rejection of the claims 7 and 8 under 35 U.S.C. 103(a) as being unpatentable over Kamata et al. (EP 1 134 967), hereinafter Kamata, in view of Li (US 6,833,862) is requested, based on following remarks:

As outlined above applicant believes that Kamata discloses a non-analogous art compared to the claimed invention.

Li discloses, in case a correction takes place only outside a predefined diameter r_T , the following corrected pixel value p_0 (Col. 4, lines 41-43):

$$p_0 = p_i x(r^2 - r_T^2) + 1,$$

wherein p_i and p_0 are pixel values before and after vignetting correction. It is to be noted that Li discloses a correction value, which is dependent upon the **distance of the pixel** to be corrected **from the diameter r_T** , while claim 7 of the claimed invention discloses "wherein said variable correction factor depends upon the **distance between said pixels and the center of said sensor array**".

None of the applied references or a combination thereof address the methods of the claimed invention disclosing "a method to compensate vignetting in **digital cameras**, except pixels being close to the center of the array sensor.... , wherein said variable correction factor depends upon the **distance between said pixels and the center of said sensor array**". Therefore applicant believes a combination of both references is non-obvious and wouldn't yield the claimed invention. Hence Applicant believes the claimed invention to be patentable over Kamata in view of Li.

Claim 8 is a dependent claim upon its base claim 7 which is believed to be patentable according to the arguments outlined above,

Claims 7 and 8 of the claimed invention are believed to be patentable over de Kamata in view of Li as it is respectfully suggested that the combination of these two references cannot be made without reference to Applicant's own invention. The claimed methods are believed to be novel and patentable over these references because a combination of the claimed elements would not address the methods of the claimed invention, namely as disclosed in claim 7: "A method to compensate vignetting in digital cameras comprising a multiplication of each pixel output of the array sensor of the camera, except pixels being close to the center, with a variable correction factor defined for said pixels, wherein said variable correction factor depends upon the distance between said pixels and the center of said sensor array". That is to say there must be something in the prior art or line of reasoning to suggest that the combination of these two references is desirable. We believe that there is no such basis for the combination.

Examiner Adam L. Henderson is thanked for allowing claims 13-20 and for allowing claims 3-6 and 9-12 if rewritten in independent form.

Allowance of all Claims is requested.

It is requested that should the Examiner not find that the Claims are now Allowable that the Examiner call the undersigned at 845-452-5863 to overcome any problems preventing allowance.

Respectfully submitted,


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